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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---|-------------------------|
| 10/714,836 | 11/14/2003 | G. Jason Wei | 163.1141USC6 | 3220 |
| <div>7590 01/19/2007 MERCHANT & GOULD P.C. Attention of Mark T. Skoog P.O. Box 2903 Minneapolis, MN 55402-0903</div> | | | <div>EXAMINER DOUYON, LORNA M</div> | |
| | | | <div>ART UNIT 1751</div> | <div>PAPER NUMBER</div> |
| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE | | |
| 3 MONTHS | 01/19/2007 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/714,836

Applicant(s)

WEI ET AL.

Examiner

Lorna M. Douyon

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. This action is responsive to the amendment filed on October 30, 2006.
2. Claims 1-3, 6-24 are pending. Claims 1-3, 6, 11 and 14 are amended. Claims 16-24 are newly added.
3. The objection to claim 14 is withdrawn in view of Applicants' amendment.
4. The rejection of claims 1-2, 4-11, 14-15 under 35 U.S.C. 112, second paragraph is withdrawn in view of Applicants' amendment.
5. The rejection of claims 1-14 under 35 U.S.C. 101 as claiming the same invention as that of claims 1-14 of prior U.S. Patent No. **6,258,765** is withdrawn in view of Applicants' amendment.
6. The rejection of claims 1-4, 7-14 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over each of the references cited in paragraph 7 of the previous office action is withdrawn in view of Applicants' amendment. Each of the cited references, however, still apply to the newly added claims. Please see the rejection below.

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7. Copending Application No. **10/714,355** is now US Patent No. **7,087,569** and copending Application No. **11/009,315** is now US Patent No. **7,094,746**. Please see the rejection below as they apply to the amended claims.

Claim Rejections - 35 USC § 112

8. Claims 3, 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3 lacks support for "the organic sequestrant comprisesphosphonic" with respect to claim 2 which recites "the composition further comprises an organo phosphonate". It is suggested to either replace the "the organic sequestrant" in lines 2-3 with "the organo phosphonate", or replace "the composition " in line 1 of claim 2 with "the organic sequestrant" to properly provide support for claim 2.

Claims 12 and 13 lack support for "the solid" (see line 1 of each claim) with respect to claim 1 which deleted this limitation.

Double Patenting

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

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patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 1-3, 6-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-14 of U.S. Patent No. **6,258,765**; and claims 1-16 of U.S. Patent No. **6,653,266**. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to similar compositions having similar ingredients and proportions differing only in that the present application requires an organic sequestrant which is an aminocarboxylic acid whereas US '765 or US 266 requires an organo amino acetate. It is, however, commonplace in chemistry that acids will react with the common alkali metal hydroxides to form salts, therefore the common salts are said to be unpatentable variants and to be suggested to the chemist by the old acid, see *In re Williams*, 89 USPQ 396.

11. Claims 16-17, 20-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-10 of U.S. Patent No. **6,150,324**; claims 1, 6, 9-10 of U.S. Patent No. **6,156,715**; claims 3-4 of U.S. Patent No. **6,410,495**; claims 10-14 of U.S. Patent No. **6,436,893**; claims 1, 10-12, 15-16, 18-20, 24, 26, 35, 40-42, 45-46, 48-50 and 54 of U.S. Patent No. **6,660,707**; claims 15-18, 20-21, 25-26, 28-34 of U.S. Patent No. **6,177,392**; claims 18-22, 24-26, 29-31, 33-39 of U.S. Patent No. **6,583,094** and claims 18-22, 33-34 of U.S. Patent No. **6,831,054**. Although the conflicting claims are not identical, they are not patentably

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distinct from each other because all sets of claims are drawn to similar compositions having similar ingredients and overlapping proportions. Optimization of the proportions is within the level of ordinary skill in the art. Even though each of the above patents does not explicitly disclose the melting transition temperature of the binding agent, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the compositions of each of the above patents to exhibit a melting transition temperature within those recited because similar ingredients have been utilized.

12. Claims 1-2, 6, 13; and claims 16-17, 20-24 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 11-13, 16; and claims 1, 4, 5, 8 and 10; respectively, of U.S. Patent No. **7,087,569**.

Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to similar compositions having similar ingredients and overlapping proportions. Optimization of the proportions is within the level of ordinary skill in the art.

13. Claims 1, 6; and claims 16-17 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 6-7; and claims 2-4; respectively, of U.S. Patent No. **7,094,746**. Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims

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are drawn to similar compositions having similar ingredients and overlapping proportions. Optimization of the proportions is within the level of ordinary skill in the art.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

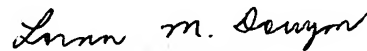
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on 571-272-1029. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Lorna M. Douyon
Primary Examiner
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